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[54] **VELOCITY REDUCTION METHOD TO REDUCE THE FLOW-INDUCED NOISE OF TOWED SENSOR SYSTEMS**

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[52] **U.S. Cl.** **367/20**; 367/15; 181/110

[58] **Field of Search** 367/15, 16, 106, 367/20, 130; 181/112, 110; 114/45

[56] **References Cited**

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[57] **ABSTRACT**

A system and method are disclosed for reducing flow-induced noise in an underwater towed system. The system includes at least one neutrally buoyant towed array, a tow platform for defining a towed direction of the at least one towed array, a neutrally buoyant tow cable connected to the at least one towed array and the tow platform, and a deploy and retrieve apparatus for deploying and retrieving the tow cable. The deploy and retrieve apparatus is connected to both the tow cable and the tow platform. Deployment of the tow cable from the deploy and retrieve apparatus correspondingly deploys the at least one towed array, and retrieval of the tow cable with the deploy and retrieve apparatus correspondingly retrieves the at least one towed array. The speed of deployment of the tow cable can be varied to decrease the velocity of the towed array relative to the surrounding water thus reducing flow-induced noise.

18 Claims, 3 Drawing Sheets